**1. Select five methods from the String JavaDocs and describe the following for each:**

**(a) What is the method signature?**

**(b) What does the method do?**

**(c) Why would this method be useful (how could you use it)?**

i)String charAt() Method

a. public char charAt(int index)

b. This method returns the character at the specified index in the string/

c. This method is useful because it returns a char value at the given index number.

ii) String concat() Method

a. public String concat(String *string2*)

b. This method is equivalent to the + operator which concatenates a string to the end of another string.

c. This method is useful because you can concatenate multiple strings to form a single string.

iii) String trim() Method

a. public String trim()

b. This method removes whitespaces form the ends of a string.

c. This method is useful when you need to clean up whitespaces.

iv) String length() Method

a. public int length()

b. This method returns the number of characters in the string.

c. This method is useful because it can be used for string manipulation such as trimming whitespaces.

v) String replace() Method

a. public String replace(char *searchChar*, char *newChar)*

b. This method replaces a specified character or substring with another character or substring.

c. This method is helpful when you need to format or change a character or substring.

**2. Select five methods from the Array JavaDocs and describe the following for each:**

**(a) What is the method signature?**

**(b) What does the method do?**

**(c) Why would this method be useful (how could you use it)?**

i) asList()

a. public static <T> List <T> asList(T... a)

b. This method returns a fixed-size list backed by the specified array.

C. This method is useful when you want to convert an array to a list.

ii) copyOf(boolean[] original, int newLength)

a. public static boolean[] copyOf(boolean[] original, int newLength)

b. This method returns a new array, truncating or padding with false elements so that the copy has the specified length.

c. This method is useful when you want to manipulate an array without changing the original array.

iii) copyOfRange

a. public static char[] copyOfRange(char[] original, int from, int to)

b. This method copies the range of the char array into a new char array.

c. This method is useful when you want to use a range of characters from a larger array without changing/ manipulating the original array.

iv) equals

a. public static boolean equals(boolean[] a, boolean[] a2)

b. If two specified Booleans are equal to each other (contains the same number of elements), this method returns true.

c. This method is useful when you want to check if two Boolean arrays have the same data.

v) sort

a. public static void sort(char[] a)

b. This method sorts the specified array in ascending order.

c. This method can help you sort an array of names alphabetically.

**3. What is your favorite thing you learned this week?**

I learned using arrays and methods and how it can make my work efficient and not tiresome.

References

<https://www.w3schools.com/java/java_ref_string.asp>

<https://docs.oracle.com/javase/7/docs/api/java/util/Arrays.html>